## COVID-19 Event Risk Assessment Planner

Estimates chance that one or more individuals are COVID-19 positive at an event given event size (x-axis) and current case prevalence (y-axis) 1,000,000 2% Chance 50% Chance Active circulating infections in the USA, I 100,000 Scenario: 20,000 cases 5.9% chance 45% chan 0.6% chance 99% chance 0.061% chance 10,000 Scenario: 2,000 cases 5.9% chance 0.6% chance 0.0061% chance 0.061% chance 45% chance 1,000 Less than 1% chance of COVID-19 100 positive attendee at the event 10 100 1,000 10,000 100,000 10

Final in Atlanta Calculation note - J.S.Weitz - jsweitz@gatech.edu - 3/10/20 - Risk is  $\epsilon \approx 1 - (1 - p_I)^n$  where  $p_I = I/(330 \times 10^6)$  and n is event size March 10, 2020, License: Creative Commons BY-SA 4.0, i.e., Share, Adapt, Attribute - https://creativecommons.org/licenses/by/4.0/Assumes incidence homogeneity, code https://github.com/jsweitz/covid-19-event-risk-planner

Hockey match

March Madness

Small concert

Wedding reception

Dinner party